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October 31, 2001

The Honorable Christine Todd Whitman
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
Room 3000, #1101-A
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Subject: Comments on HPV Test Plan and Robust Summaries for Cyclohexyl Isocyanate

Dear Administrator Whitman:

The following comments on the test plan for “Cyclohexyl isocyanate” are submitted on behalf of the Physicians Committee for Responsible Medicine, People for the Ethical Treatment of Animals, the Humane Society of the United States, the Doris Day Animal League, and Earth Island Institute. These health, animal protection, and environmental organizations have a combined membership of more than nine million Americans.

The Bayer Corporation’s test plan reflects a thoughtful consideration of the HPV framework and the October 1999 Agreement. Bayer presents the logical argument that, since this chemical is exceptionally reactive and therefore tightly controlled during its production, storage, transport, and processing, the full SIDS battery is inappropriate and unnecessary.

However, in attempting to address the EPA’s “Guidance for Testing Closed System Intermediates for the HPV Challenge Program,” Bayer violates the following terms of the October 1999 Agreement outlining principles to reduce repetitive or uninformative tests on animals:

1. In analyzing the adequacy of existing data, participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach. Participants may conclude that there is sufficient data, given the totality of what is known about a chemical, including human experience, that certain endpoints need not be tested.
2. Participants shall maximize the use of existing and scientifically adequate data to minimize further testing.
8. ...As with all chemicals, before generating new information, participants should further consider whether any additional information obtained would be useful or relevant.
9. Because validated non-animal tests for some SIDS endpoints may be available soon, participants shall make the following revisions to the sequence of testing:

(a) Testing of closed system intermediates, which present less risk of exposure, shall be deferred until 2003.

Cyclohexyl isocyanate is extremely reactive and is therefore tightly controlled. Any further testing will not expand the understanding of this chemical's behavior or change the way in which it is handled. Therefore, the Bayer Corporation has proposed a reduced testing strategy, contingent upon results of the chemical properties tests. We support this reduced testing strategy. However, it does not go far enough. We recommend elimination of the developmental toxicity test for the same reason reproductive and repeat dose tests are not warranted.

Bayer applies thoughtful toxicology in the HPV Program by proposing not to conduct lethal tests on fish, based on what is reasonably expected from the hydrolysis studies. Although no formal studies were located on the hydrolysis of cyclohexyl isocyanate, Bayer is keenly aware of the rapid hydrolysis of the isocyanates to associated amines in water. The aquatic toxicity tests are conditionally proposed and will not be conducted if the hydrolysis tests demonstrate, as expected, that cyclohexyl isocyanate hydrolyzes readily into cyclohexylamine, as the experimental results would not be relevant. PCRM encourages this type of thoughtful analysis that uses the totality of what is known about a chemical to reduce irrelevant tests on animals.

Bayer maintains that cyclohexyl isocyanate is a closed system intermediate. Therefore, exposure to this compound is highly unlikely and the utility in conducting any further tests should be questioned. However, in the spirit of the HPV program, Bayer has accepted EPA's suggestion in the Guidance Document that even though a chemical is a closed system intermediate, developmental toxicity testing is required. If exposure to a chemical is so low that repeat dose and reproductive toxicity tests are not warranted, by extension of that principle, developmental toxicity tests are not warranted either.

Despite its repeated stated commitments to the October 1999 Agreement and the reduction of unnecessary animal tests, the EPA's policy calls for even more tests on closed-system intermediates than required under the OECD SIDS battery, upon which the HPV program is supposed to be based. In the OECD SIDS program, "intermediates currently have a lower priority in the context of the SIDS work and, consequently, the choice of these chemicals by Sponsor countries is discouraged."

The EPA Guidance Document contradicts the EPA official's contention that "the HPV program is a *voluntary* program" by stating that all tests other than repeat dose and reproductive toxicity tests are *required*. Far from discouraging tests on closed system intermediates, the EPA actually states that there are situations in which a full SIDS battery is warranted for closed system intermediates. Moreover, the EPA's guidance for closed system intermediates makes them almost impossible to certify, as they require documentation of how the compounds are handled in all facilities, even those of non-participating companies.

Finally, should the Bayer Corporation decide not to eliminate the developmental toxicity test, as we suggest, it must defer such testing until 2003, per the October 1999 agreement.

Thank you for the opportunity to comment. I can be reached at 202-686-2210, ext. 302, or via e-mail at <ncardello@pcrm.org>. Correspondence should be sent to my attention at PCRM, 5100 Wisconsin Ave., N.W., Washington, DC 20016. I look forward to your response on these important issues.

Sincerely,
Nicole Cardello, M.H.S.
Staff Scientist